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And he gave it for his opinion, that whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind and do more essential service to his country than the whole race of politicians put together—Dean Swift.

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F I E L D S E E D S



**As Good as We
Can Make Them**

A. M. Ferguson & Co.
Field Seeds Exclusively
Sherman, Texas

Greetings for 1912.

Nine years ago I started out to gratify a long cherished desire, and turned my attention specially to improving the seeds of the field crops of the great Southwest. It seemed strange to me then, and seems stranger still now, that not one individual had energetically taken up the work long before. We had seed-dealers aplenty, but the laws of inheritance are not studied in city warehouses.

One of the most precious things in the world is the labor of human beings, and I found myself asking over and over, "What difference does it make what kind of seeds are planted on the millions of cultivated acres in the great Southwest". I have not yet answered my own question, just as I had hoped, but I am still at work. I ask you to remember that the problem raised by my question is also yours.

Yours for Progress,

*Sherman, Texas,
January, 1912*

A. M. FERGUSON.

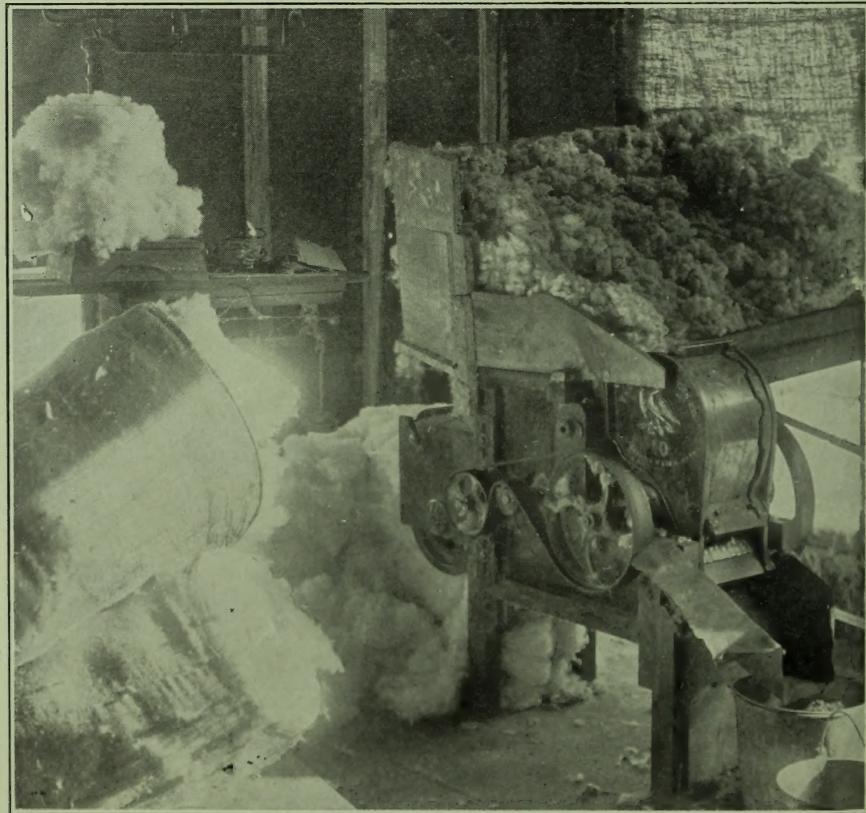


Fig. 0.—LABORATORY GIN, used in ginning individual selections, and in making accurate determinations of the percent of Lint. By the use of this gin in connection with the "progeny rows" we are able to accurately determine the most profitable selections.

Breeding-up Field Seeds

For the Southwestern Climate.

The Growing Importance of Better Field Seeds is the excuse for this little booklet. It is the justification for the self-imposed task that has become our life work. There should be neither ignorance nor indifference about the seeds planted on the home farm.



We shall attempt to explain just what is meant by "Better Seed" and to show you how our seeds have "worked out" to the profit and satisfaction of our customers. While we test many kinds of seeds, we are not conducting an experimental farm. We are making special efforts to improve a few varieties that are already known to be good yielders.

The Direct Question—And right here we want to say that this "better seed business", is an easy question for town farmers and talkative countrymen. Of course we are always advised to use "the best seed." But we come back for more definite direction: "What is the best corn; the best cotton; the best oats, etc.?"

The answer you want—Now listen! Your problem is not to make yourself believe that you want a better seed. What you really want to know is, "who has the seed that are better than the ones you now have in your own granaries." You know, when a fellow buys a piece of land he usually investigates the abstract before he pays over the coin. The trouble about the seed business is that you can't get

a lawyer or a doctor to decide the matter for you, and when you come to think the matter over yourself and talk it over with your neighbors you hear some funny things about people who "sent off somewhere" and bought what was promised to be the "best seed ever produced." Be cautious, but remember:

There is Such a Thing as Better Seed. You know that. But who has that better seed? Who makes them "better?" Now right here is where we can be of service to you. Our seeds have made good in the hands of more than 90 per cent of our customers. Just like the doctor's pills, they do not cure every time. Sometimes it is the result of a bad season and under such circumstances a fellow naturally thinks he would have been better off if he had planted something else. Sometimes it is because a variety was selected that did not suit the land.

There is no One Best Variety, equally well suited to all soils and every season. This fact suggests that caution be used in selecting seed for your

land. If the information given in our descriptions is not sufficient for you to decide, write and tell us what you want to know and possibly we can supply the information you desire. We grow only the varieties which we know are suited to Southwestern conditions. But back to the question :

How Can We Help You Select the Best Seed? Simply because we make a business of testing and "finding out" the better yielding varieties of Cotton, Corn, and Oats offered for sale or prominently recommended for the Southwest.

We Have Done More.—We have gone further. These varieties and strains of varieties that have proven to be among the best in their class, we have improved by systematically selecting out the best individuals for propagation from year to year. Just what we mean by "systematically selecting out the best individuals" will be explained further on. Here is found the key to the success of our seeds.

Practical Seed Breeding does not mean growing field crops under hot-house conditions. A variety of corn may make a fine looking sample grown on a moist river bottom. The same seed planted on drier upland might be a failure. We understand this fact and carry on our breeding work on land of average strength. When we develop a strain of corn or cotton that *makes more* than others growing *under the same conditions* we are IMPROVING THE SEED of that variety.

Success Under Average Conditions is the result we want to see in our seeds. Our seeds have proven to be money makers for 90 per cent of our customers, according to their written reports made to us. The degree of success, recorded in their letters, amounts to an increased yield of corn, ranging from a few to twenty or more bushels per acre. For cotton, they report better field yields of seed cotton and better turnouts at the gin, amounting to from one to fifteen dollars per acre—many times the cost of the seed. To verify these statements read the letters reproduced in this booklet.

Where Do Good Seeds Come From?

When I Was a Boy I often heard about "sending off" for "fine seeds." Today a very frequent question asked of us is: "Where did you get your start of those seed?" or where did you send, etc."

We have named, described, originated, or improved and introduced five varieties of field corn and recommended them to Southwestern farmers—Sur-cropper, Ferguson's Yellow Dent, Munson, Ferguson's Gourd Seed, and Chisholm; two varieties of Cotton and one of Oats, described further on. Where did they come from? The detailed answers vary for each variety. Stripped of all technical scientific phrases, the general answer is this: "By systematically selecting the most desirable individual from year to year,—starting in every case with native mongrel stock."

That Cultivated Varieties of Field Crops Run Out or degenerate into mixed mongrel stock thru natural variation and careless handling is known by everyone.

It is also known that even good varieties *may* be improved, provided the work is directed by proper intelligence and continued from year to year. *There are methods by which varieties may be improved which are as accurate in their results as is the test of speed in horses on a fair track.*

For Any Climate or section it is everywhere recognized that there are some varieties that are, on an average, better yielders than others. The following experiment well illustrates this principle: Some years ago a reciprocal test of seed corn was made in co-operation with the Kansas Agricultural Experiment Station. Two of the better yielding Texas varieties were compared with the two best yielding Kansas varieties. The results showed that

the Kansas varieties made about half as much as the Native varieties, when grown under Texas conditions. Likewise, it was found that the Texas varieties grown under Kansas conditions made only about half as much as the native seed. That such differences exist we all know,—But:

It is a Different Problem and one on which opinions and experiences often differ when attempt is made to say just which of two native varieties is the *better*,—and still more difficult to decide which is the *best* where a number of varieties must be considered. *There are methods, however, by which the superior qualities of any variety may be determined for any particular soil or climate, that are as accurate in results as is the test of speed of race horses on a fair track.*

It is a Striking Fact that speed records in horses have been lowered from time to time. It is a still more striking fact that these "record breaking" speeds have been made by horses descended from previous record-breakers. The speed is in the blood.

The Practical Breeder of Field Seeds finds also that superior yields are secured from seeds descending from ancestors showing superior yielding power. The same rule applies to poor yielders. Scientific plant breeding, as practically carried out, consists in devising methods by which the better yielding qualities of certain individuals may be accurately determined, and actually making the test from year to year, and propagating only from the best.

The Average Farmer thinks in terms of "breeds" and "varieties" which he believes to be good. In systematic plant breeding we are primarily comparing the usefulness of characters belonging to individual selections. The character of these selections are then tested in "Progeny Rows." Hundreds of individual plants are tested out—all belonging to the same variety. The more desirable strains are used in "Multiplying Blocks." Here again opportunity exists to detect weakness as well as opportunity to "rogue" out any variable or off-type individuals. The strains maintaining their characters up to the fourth or fifth generation are used in producing "Stock-Seeds," and then these in turn to produce the commercial seeds. This is shown in the diagram on page Fig. 3.



Fig. 1. DIFFERENCES IN STORM PROOF CHARACTER. The stalk on the right produced more bolls, larger bolls and matured them earlier, yet not a lock had fallen out by Nov. 4. The other stalks show locks decidedly "stringed." All grew in the same field.

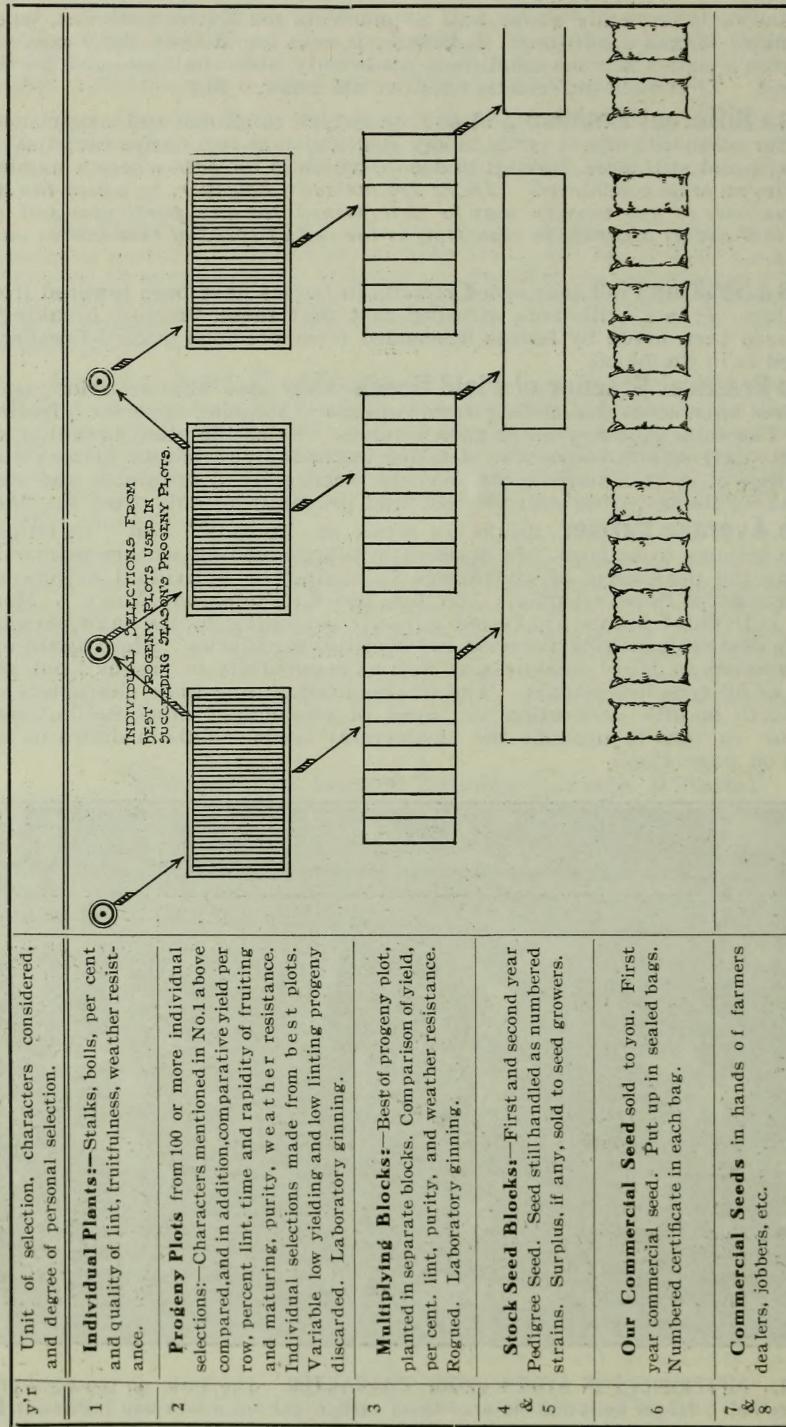


FIG. 2. THE NATURAL HISTORY OF GOOD SEEDS. The above diagram shows the steps in the production of improved seeds. We improve, grow and sell to you. Every bag of our specially improved seed is sent out in sealed bags with a numbered certificate in each bag.

Practical Farmers who start out to secure "better seeds" have many points to consider. They will do well to remember that there are four classes of people who have seeds for sale.

1st. *Plant Breeders*,—men who make a business of growing seeds from first choice, superior yielding individuals from year to year, and who grow their commercial seeds from freshly improved stock-seeds each year.

2d. *Seed Growers*,—persons who do not propagate their own stock-seeds but secure seeds and propagate for seed purposes. To merit the title "seed-grower" one should at least practice some sort of "culling," "rogueing," "growing a seed patch" or other means by which a large per cent of the obviously undesirable seeds may, at least, be excluded from the stock seeds used in growing the commercial seeds.

3d. *Farmers*,—who grow crops from year to year, but exercise no more than ordinary care in maintaining the quality of their seeds.

4th. *Seed Dealers*,—persons or firms who buy and sell seeds of all classes and grades, and from various sources. They are usually without first hand information about the quality of the seed except such as may be determined by the appearance of the seeds themselves. Their supplies are usually purchased from farmers or seed-growers.—

Generally Speaking the person who starts out to secure reasonably well-bred seed of good yielding varieties will have his chances of success increased by dealing directly with the individual who is personally responsible throughout for the *breeding, growing, preparation and handling* of the seed. His knowledge of the suitability of the variety and the quality of the seed, etc., is direct and more complete. If the seeds are not just as represented, you know who is responsible.

Every Purchaser of Field Seeds will be more likely to get the kind of seeds he believes he should have, if he will insist on knowing where, and by whom grown and prepared. In some tests of seed corn bought in the open market, made for the Texas Corn Growers Association, it was found in several cases, that from two to five different varieties of corn were sold under the same name. It was also found that there was a wide variation in the yields per acre when grown under the same uniform conditions.

Merely Keeping Good Faith in the selling of field seeds is not going to remove the chance that the seeds you received are not what you ordered. If we bought our seeds from any and everyone, even the cost was not a consideration, we might be honest in our efforts to get a dependable grade of seeds,—we would still be dependent on the other fellow—and so would you. But we are not mere seed dealers.

We Have Investigated Your Seed Problems more than you have yourself. When it is a matter of seed of varieties *selected, improved, grown and prepared* under our own arrangement, we are giving you the benefit of the most thorough-going, first hand study, and investigation on your field seed problem that has ever been made in the Southwest. This claim is not made boastfully. It is simply a question of how thoroughly we have been studying your seed problems. When it is recalled that for seven years we have been testing by practical field test, from fifty to more than a hundred samples of commercial seed corn, including practically all the varieties used by Southwestern farmers, it means we have been spending time and money to find out what are the best varieties for our customers. Information from other sources has been used to the same end. From the stand point of our own crops and the reputation of our seed business it is to our personal interest to have the best seed.

"Your Ferguson's Roundnose Cotton seed turned out all right and I am well satisfied with it. They were pure bred. Everybody could see that. In spite of the long drouth it turned out about 4 per cent. or 5 per cent. better than my common cotton, (all mixed seeds). My father ordered some of your Mebane Triumph seeds and are still better I am told, 1365 lbs. Mebane Triumph gave a bale of 565 lbs lint."

EDMOND HARTSTACK

We are proud of our record. When we are able to supply seeds that have met the expectations of 90 per cent of our customers, we know our seeds are "making good."

Another Evidence of Success is the "repeat order." On our cotton seed and seed corn many of our customers come back every second or third year for "fresh stock." These seeds are used to grow seeds for their neighbors and dealer-stock.

Visitors are Always Welcome. If you are coming to Sherman, in the growing season, we would be glad to show you our breeding plots of corn, cotton and oats. It will be worth your time.

How Our Seeds are Prepared.

We exercise every practical precaution to keep our seeds bred up to the highest degree of high yielding power and purity. While we make a special business of breeding for purity, as well as good yielding quality, we have no desire to sail under false colors. We have many enquiries for "absolutely" pure seed. We cannot supply such seed! We would like to have such seeds ourselves, but we have not yet been so fortunate as to overcome the natural variation inherent in all plants.

However, our seeds are as pure as unusual care and attention can make them. While we do not promise absolutely pure seed, we do pledge honest good faith in the breeding, testing, growing, handling, preparation, etc.

We Make Plain Descriptions and if you find anything in this booklet that needs further explanation or confirmation you will do us a favor by calling our attention to the matter. Besides describing the seeds we offer for sale we try to have these annual publications convey some practical information about field seeds. The illustrations and brief explanatory matter will no doubt prove interesting to many farmers, and we trust will give them an idea of the care, time, patience, and money necessary to keep field seeds "bred up."

Our Liberal Guarantee. All our seeds are sold for cash in advance, sacked and delivered f. o. b. Sherman, but we want customers at a distance to feel that they have the same protection that they would have if right here in Sherman.

When your seeds arrive, examine them carefully, and if not satisfactory and just as represented, return to us at once by freight, at our expense, and we will refund your money without questions. We make you the sole judge. We of course cannot, and do not, assume any responsibility for the character of the crop.

The Appearance of Our Seeds in hand will vary from year to year owing to the character of the season, but you have this assurance: That they have descended from carefully bred seed, and grown from our own stocks.—This is of more importance than the mere appearance of the seed. To know that you are getting seed that have a reputation of giving satisfactory results in good and bad seasons, is your best guarantee.

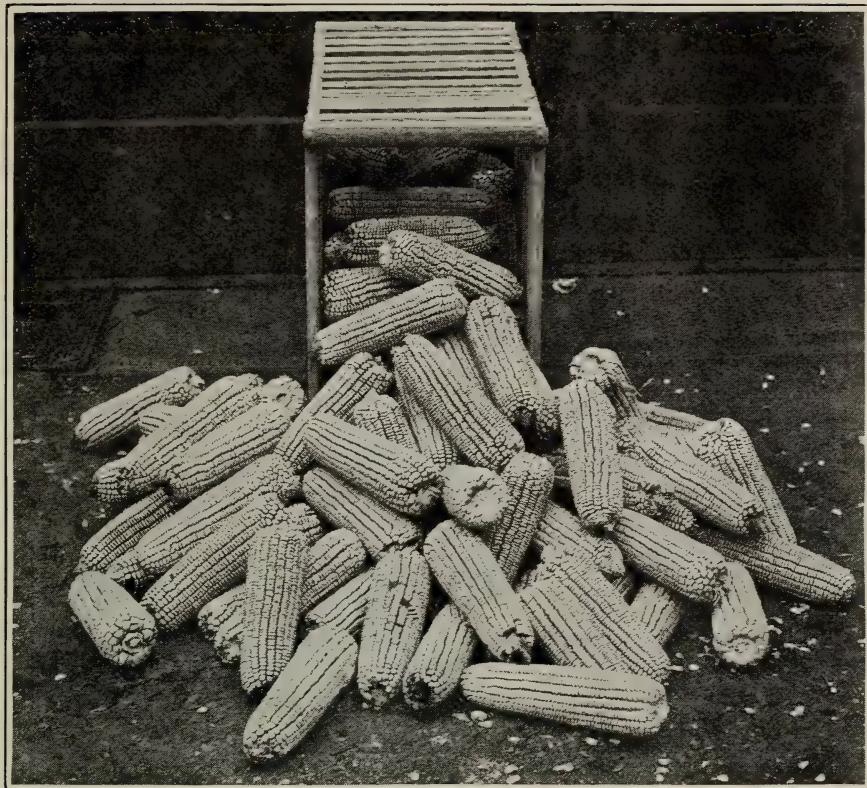
Our Prices are such that the cost per acre will be from 10 to 50c. an acre more than where ordinary seeds are used. Last year Mr. Van Wisdom wrote us as follows:

"Find enclosed P. O. money order for \$21.00 for which ship me by freight 15 bushels of your Mebane Triumph cotton seed. Yours truly,
Van Wisdom."

P. S.—That looks like a long price to pay for cotton seed, but I have tried some of your seed before, and found them worth the money."

"Will say that we are highly pleased with Mebane Triumph Ferguson's Roundnose Cotton seems to be earlier than the Mebane Triumph; has good sized bolls, and is easy to pick. Do not know how it will turn out at the gin, as we did not have enough for a bale."

W. F. GREGORY.



Seed Corn

The Feed Problem of the Southwest is of direct concern to all our people. More than half the money brought into the country by cotton in the past season, must be sent away to buy feed and feed-products. The success of our grain crops, corn especially, has been particularly discouraging in recent years, tho the ten-year average is not far from 20 bushels per acre. We must not forget that the ten year average acre values of our corn and cotton crops, low as they are, teach that we can grow corn much cheaper than it can be imported.

The Corn Failures in recent years have taught some valuable lessons in regard to seed corn for the Southwest. For many years we have vigorously advised our farmers to rely strictly on native grown seed corn ; that the use of Northern grown seed was an economic loss to our farmers even tho such seed should be given to them.

The old slogan "Plant Northern seed corn because it's early" is the selling talk of the commercial seed-dealer. A number of our farmers are duped by the plausibility of the slogan. However, such an idea is a mere claim, made without the basis of general, practical experience, or the certainty of scientific test.

Plant Native Grown Seed Corn! For several years the Texas Corn Growers Association thru its special committee, of which Prof. D. A. Saun-

ders is now chairman, have been making exhaustive tests of the seed corn used by Texas farmers. These practical field tests have been made at Sherman, Waco, San Antonio, Victoria, College Station, Tyler, Kerrville, New Braunfels, and Marshall. These results have shown that *regardless of season or place the Northern grown seed corn has not made yields justifying their use by Southwestern farmers when native seed could be had.* The superiority of the native grown seed corn amounts to from five to twenty-five bushels per acre—and in some cases more. What is said here for Texas, applies also to Oklahoma, Arkansas, or Louisiana.

The Money Value of Native Seed Corn, in view of such significant facts, is far beyond any reasonable cost of same. It may be figured as follows: Grant a gain of only five bushels per acre; that a bushel will plant seven to ten acres,—and it is plain that a bushel of good native seed corn means a gain of 35 to 50 bushels, in the crop planted from one bushel of such seed. Such seed would be worth \$25 to \$40 per bushel based on current market prices for corn.

The Supply of Our Own Seed is very much reduced, owing to the very unfavorable seasons. We offer a limited supply of Surcropper, Ferguson's Yellow Dent, Munson and Chisholm grown from our own stock-seeds.

Commercial Seed Corn.—In addition to the above we are able to offer seed of the above varieties purchased from our former customers. We have tried to confine our sales of seed corn to stocks of our own varieties. However a large number of our customers have asked us to use the knowledge gained in our long experience to assist them in securing reasonably good seed corn.

If any of our customers are not able to secure a supply of satisfactory seed corn, write us and we will be glad to assist them in getting whatever they desire. Special quotations on available supplies will be made on request.

Northern Corn.—To all who feel that their experience is such that they are justified in using Northern grown seeds, we wish to say that we can supply them at the usual prices for the best grades of Northern seed corn. There is a wide difference in even Northern grown seeds. However, while we can supply the Northern grown seed corn at much less cost per bushel, please understand that our advice is to take chances with the poorest native corn to be had, rather than the best of the Northern grown unacclimated seed.

"For a dry year like this I think Surcropper is the corn. I tried five kinds side by side, and it was the earliest and stayed green longer than any other."

GUS HARRIS.

"I am well pleased with the "Surcropper Corn" I ordered from you last year. I have made this year, an average of about 30 bushels of good sound corn on up land, while the native or common corn is almost a total failure. I think it is the only corn for a dry year. It is almost sure to make a fair crop.

"The "Chisholm Corn" is a good corn but not near as good a drouth resister as the Surcropper. Can say again that I am well pleased with the results from the corn."

E. N. SEWARD.

"I will want 5 bushels more of "Surcropper Corn" for summer planting. If you are going to run short, let me know so I won't be too late. My spring planting of "Surcropper Corn" is holding up better than any corn on the ranch."

R. G. LOVE.

"I consider my purchase of your "Surcropper Corn" the best investment made this year. I have planted it on three different farms and beat the neighbors so badly on yield that they gave me credit for being an experienced farmer, but it was the seed that made the difference, I know this."

LEWIS MAVERICK.

The "Surcropper Corn" appears to stand drouth much better than most other varieties of corn, judging by its remaining green longer, but we had such a complete failure on corn that we cannot tell much about it. Would like to try it again.

W. F. GREGORY.

I am glad to tell you of the results I had with your "Surcropper Corn" It will make anywhere from 20 to 30 bushels per acre, with very unfavorable seasons.

W. M. SUMMERLIN.

We have not had a real good year for corn, though my "Surcropper Corn" was fairly good. I think I will make about 300 bushels of Surcropper this year. I look for it to do better next year than it has this.

G. C. BELL.

SURCROPPER CORN, (All Seasons.)

The Best Drouth Resisting, Quick Maturing Corn Ever Introduced in the Southwest.

For the last three years this variety has averaged higher acre yields and made corn of better quality than any variety we have grown. In variety tests it has given similar results. No better recommendation can be given for this variety than the results reported by our former customers. Read their letters.



Fig. 3.—Breeding rows of Surcropper corn. Alternate rows detasseled. Note the low stout stalks. Spring planting.

stubble, and it has proven its worth every time. It is several weeks earlier than most varieties of Mexican or June corn, and can therefore be planted much later and still escape the early frosts. It is earlier than ordinary native corn, and in this respect it is equal to Northern corn, but having a great advantage in its drouth resisting qualities. It will mature in 110 to 120 days.

While this corn has all the advantages of a drouth resister, tiding over hot dry weather, like June corn, it has a stalk no larger than ordinary corn. See the photograph made in May of March planted corn. The ears are of good size being stocky and well-formed. There are from 12 to 18 rows of large white grains that are of a good depth for early corn.

If you want an early corn that will make from 40 to 50 bushels under favorable conditions, and some corn even in a drouth, plant Surcropper. Remember we sell no seeds we cannot honestly recommend,

We offer this fine corn at the following prices : One peck, \$1.25; half bushel, \$2.25; one bushel, \$4.00. It is an unrivalled drouth resisting strain, suitable for spring or summer planting. We have been unable to supply the demand for this fine corn.

Surcropper is a distinct type of field corn, which we introduced for the first time in 1908. It attracted our attention in 1901 when the spring season was so dry that many fields of corn utterly failed. SURCROPPER did not. It made corn when all other varieties in the neighborhood failed. In a test plot at Austin it made corn while many other varieties in adjoining rows failed because the dry weather was so severe that the tassels did not come out. If you are in a section where corn suffers from dry spells in the spring and you want a corn that will be sure to make, plant SURCROPPER. We call it SURCROPPER because it is a sure-cropper. We especially recommend this corn for spring planting in drouthy districts. It is also a success as a summer corn. It has been found well suited to the four Southwestern states.

We have been planting it as an early spring corn or a summer corn on potato land or grain

Ferguson's Yellow Dent Corn.

This is the best variety of yellow corn. It has been widely grown in Oklahoma, Texas, Arkansas and Louisiana and proven to be a satisfactory yielder of rich yellow corn wherever it has been tried. Every farmer who sees FERGUSON'S YELLOW DENT recognizes its fine qualities. The reputation it has made is another illustration of its adaptability to a wide range of soil and climate, and of the good faith we are trying to keep with practical corn growers. Read the few letters concerning FERGUSON'S YELLOW DENT corn and note the profitable results reported. This variety has been tested by the Arkansas Experiment Station, at the eleven sub-stations, along with a number of standard varieties of Northern and Southern origin. When the results of these disinterested tests were averaged up FERGUSON'S YELLOW DENT stood at the head of the line. This is fast becoming recognized as the best yellow corn for the entire Southwest, because of its fine qualities and adaptability to a great many varieties of soils and climates. We have many letters from former customers who report that it has outyielded any variety of corn on their own or their neighbor's farms. Whenever we are called upon to name a variety of corn that will be most generally satisfactory for a wide variety of soils and seasons we say FERGUSON'S YELLOW DENT. It is a splendid yielder on upland and always pleases on bottom lands. It is a good drouth resister and stands up well when other varieties blow down.

Ferguson' Yellow Dent is a medium early maturing variety. It is not so early as Surcrocier, nor so late as Munson. The ears are of medium size, stout or stocky, unusually heavy for their size, and well covered at the tip end by a tight fitting shuck which protects it from weevil in a large degree. The ears make a splendid shelling record. The cob is red, covered by large, broad, deep golden yellow grains that make a most beautiful sample of shelled corn. We have had many varieties of yellow corn in our numerous tests during the last seven years, but have never yet found a variety of yellow corn that we regard the equal of this popular variety.

Prices—one peck \$1.00 : half bushel, \$1.85; 1 to 4 bushels, \$3.50 per bushel.

Commercial Seed—Seed corn of above variety grown and prepared by our former Customers—write for current information on supply and prices.

Chisholm Corn.

CHISHOLM was introduced by us in 1907-8 and has maintained popular approval from the start as a heavy yielder of good sound corn. In the tests made by the Experiment stations and the Texas Corn Growers Association it has always taken high rank. Its drouth resisting qualities may be judged from the fact that it has ranked first in yields per acre for several years in the tests conducted by the U. S. Department of Agriculture at the San Antonio Experiment Farm.

This is a very attractive corn because of its large, sound, deep, white oily grains, that completely cover a bright red cob. The ears are large sized in favorable seasons but if by chance the seasons makes them small, even the nubbins will show large attractive grains. The ears are stout, covered by a coarse heavy shuck which protects the ears thoroughly.

CHISHOLM Corn belongs to a type of corn widely distributed. The strain which we call CHISHOLM, we have improved by systematic breeding, using the ear-to-row-test methods recommended by plant breeding specialists everywhere, and followed by all corn breeders who merit recognition as such.

Proof of the superiority of our high bred CHISHOLM corn is found in the high yields made by this variety in numerous practical field tests of varieties made in the Southwest during recent years. Chisholm corn has about the same maturing period as Ferguson's Yellow Dent. Prices—same as for Ferguson's Yellow Dent.—Also have commercial seed.

Munson Corn.

We Originated and Introduced this Famous High-Yielding, Prize-Winning Corn.

This famous variety of corn was originated and first introduced eight years ago by A. M. Ferguson.* It was the first native Southwestern variety ever put upon a pure bred basis by scientific breeding methods. We have never introduced or sold seed of a variety of corn that has not made a good reputation in the hands of practical corn growers. This is the result of a conservative policy followed from the beginning of our seed improving work. Our policy is to "Sell no seeds we cannot honestly recommend for the best interest of our customers." MUNSON Corn has been an unrivalled success since its first introduction. This variety is not without its faults for it lacks some of the "fancy points." These deficiencies are more than offset by its ability to make large yields per acre. It has won many first prizes at the State shows in Oklahoma, Arkansas, Louisiana and Texas, but the greatest prize it will bring to you is "bushels of corn per acre."

Munson Corn was named for Prof. T. V. Munson, Texas' distinguished grape-breeding specialist, who after seeing the corn says that he is proud of his name-sake. It is a medium late corn with good, vigorous stalks, producing ears of large size. The ears are well proportioned and frequently 10 to 14 inches long. The grains are oily white, medium size, and in favorable seasons, often measure a half inch or more in length. The cobs are also white. It is a good yielder on any land suitable for corn, but seems to grow to greatest perfection on sandy soils. It is especially recommended for rich bottom lands.

Prices same as for Ferguson's Yellow Dent.

* MUNSON Corn was my first effort to develop a variety that would be more profitable to Southwestern farmers than the inferior mongrel stuff commonly grown at that time. After satisfying myself by the strictest scientific test that I had a variety worthy of introduction I pondered for a name. Instinctively my mind turned to early associations in plant breeding at the completion of my college course, fifteen years ago. It is especially gratifying to know after these years that the first scientifically bred native variety of corn has proven to be worthy of the distinguished name it bears.

DEAR MR. FERGUSON

"While our corn made nearly nothing this year, Surcropper come out ahead in numbers of plots, and in the per-acre-yields of the variety plots we had. Some of the larger fields produced a larger per cent of good corn, but none made as much per acre yield.

T. W. BUELL,
Supt. State Experiment Station, Denton, Texas,

"I will write to let you know how the seeds I obtained from you did. They all gave satisfaction. The cotton is all good. The Ferguson's Roundnose Cotton is fine. The peck of seed you sent me planted about three-fourths of an acre and it looks like it will make a bale. Would like for you to see it: you can hardly tell which way the rows run.

"The corn you sent me made a little corn and that is something lots of corn did not do up here this year. All the corn we had planted of your kind of corn made something. In places there are some pretty good ears now. I noticed a field of corn just across the road and it burned up pretty bad. The tassels turned white while ours stayed green, and his corn was worked better than ours."

LEROY MUNSON, Oklahoma.

The Surcropper Corn did splendid and was a good keeper.

HAMP TOMLINSON, Texas.

Some of the Munson ears measured 13 inches and the average size was excellent. The average yield of the seeds bought of you was about 64 bushels of shucked corn per acre.

HUGH C. WALLIS, Louisiana.

I certainly opened the eyes of the old farmers round about with this corn. They said, "That old man sure raised the finest corn in the country. The ears looked like coons on the stalks." 75 ears of the Munson Corn made a bushel of 75 pounds.

J. H. ALSWORTH, Texas.

I am proud of your efforts to improve our farm seed. I had the good fortune to plant some of your good seed corn last spring. I like your Chisholm. The stalk is as fine as I ever saw: not too high, good fodder, short ears well set on stout, heavy, short stalks, tapering well from the ground. Your Yellow Dent is the best of all. We planted one bushel of it. It stood the drouth better than the others and made nearly double the corn to the acre. The boys will plant it next year and I will plant Chisholm.

B. F. CLARK, Texas.

Improving Cotton Seed

The Need of Improving the Yield Per Acre of the South's greatest crop is painfully urgent when we recognize how low the average really is. This can be accomplished by better methods of cultivation, and by improving the yielding power of the plants, by seed selection. We shall try to point out the important facts to be considered, in selecting cotton seed, and to practically estimate the value of the selection in some cases. We believe that one reason why so many farmers are careless about the quality of their planting seed is because they do not fully realize the actual money value of selected seed. Either this or they do not have the time and knowledge to do the work.



Fig. 4. Breeding rows of FERGUSON'S ROUNDNODE COTTON, 1910 crop. Each row is planted from the seed of a single plant. High prairie land. Averaging 1372 lbs. seed cotton per acre, ginning 37.2 per cent lint making a 510 lbs. bale. No stalk much above knee high.

The Nature of the Cotton Plant. Cotton is a plant that naturally grows continuously from year to year. It is "tree cotton" in the extreme tropics. In our country it grows from spring, until stopped by drouth, or cold weather in the fall. It is a plant that thrives only in warm weather. To best succeed it is very necessary that the seed bed be prepared deep, thoroughly, and well in advance of planting. The actual planting however, will usually be most satisfactory, if delayed until the night temperatures are not so low as to dwarf, stunt, and weaken the plants.

Very Early Planting certainly results in increased expenses in manufacturing the crop, greater hazards by destruction from insects, severe cold winds, and other weather conditions. In planting cotton it is well to remember the reply of the lad to the school master that "The early worm frequently gets caught." Those who plant very early, do so, expecting to secure early fruit-

ing and early maturity. These qualities are very important in practical cotton growing. Our investigations lead us to suggest, however, that these advantages may be more certainly and more economically secured by using seed having early fruiting and continuous rapid fruiting qualities in the varieties of seed planted. The advantage secured in this way is not only more certain, but at less expense, and without the expensive and annoying hazards mentioned above. Do not confuse "early fruiting" with "early maturing."

The Fruiting Habits of Cotton Plants. are primarily determined by the character of the branches. There are two classes of branches produced by the main stem:

(1) **Wood Branches.** These branches are the very heavy primary branches and like the main stem produce no flowers and therefore no fruit, except on the lateral fruit branches. In a general way the development of wood branches is objectionable.

(2) **Fruiting Branches.** These grow out directly from the main branches and produce a flower at every joint near the leaf. It is understood, of course, that the cotton boll is merely the ripened fruit started first in the flower. In a general way it may be noted that the character of the fruiting branches has much to do in determining the cotton producing qualities of the stalk.

An inspection of a large number of cotton plants will show that the most desirable form of cotton plant, is one having numerous fruit branches. A large development of wood branches either in number or in size is not desirable. In our seed breeding work we favor those forms that make fruits rather than woody stalks.

Characters in Fruiting Branches—In breeding cotton for fruit or increased production, it is very necessary that the character of the plant be studied. Just as in draft-drawing horses, certain features of shape, indicates the probable ability to draw loads, so does the structure of the cotton plant indicate ability to produce cotton. The variation in the structure of the plant is such that expertness borne of experience and study, is necessary to approximate correct judgments in selecting cotton. The fruiting branches should not only be numerous but stout, close jointed, and have the habit of growing continuously.

Selecting a Variety by Field Test. A variety may be defined as a group of individuals having a common, or pure blood ancestry, and showing a reasonable degree of uniformity of characters from generation to generation. Most of the cotton planted is from gin run seed, from year to year. Such seed contain many forms and should not be called a variety. If we take seed of a number of reasonably pure varieties and plant a row of each, taking care to secure uniform stand, soil, cultural conditions etc., growing the different varieties under uniform conditions, we have a fair means of comparing their qualities and measuring the amount of the yield. From information secured in this way, and repeated for two or more seasons, it is possible to pass a reasonably accurate judgment on the merits of the varieties. The best variety would be the one producing the most valuable crop. The varieties we have have passed this test.

Improving the Variety. Within the variety, all the individual plants are not alike. By selecting seeds from the best individual plants, and testing the progeny of each selection, it is possible to accurately determine the best blood in the variety, and thus make possible its improvement.

"Improving the Variety" however is a very general term and does not give a clear understanding of what is accomplished. It would mean a more valuable crop of course. Inasmuch as the most valuable product in cotton is lint, it is obvious that the gross yield of lint will be the most important item. There are other characters than mere pounds, that determine value in lint, such as length and strength of fibre, color, body, etc. It has been our policy to encourage the use of varieties that have good qualities in the lint. Other characters, however, are of more obvious value to cotton growers.



Importance of Early Fruiting. By early fruiting is meant the habit of blooming, or fruiting early. It is a quality associated with stalks that form their fruiting limbs close to the ground. This character leads to early opening, but this early opening is influenced more by the size of the boll, as will be explained later. Early fruiting as referred to above, is usually associated with large gross yield, and is a character belonging to all good yielding varieties. Early, rapid fruiting does not mean small bolls. The largest boll'd variety we have begins fruiting just as early as the forms with smaller bolls. They do not open so soon.

Large Bolls require longer to open than small bolls, because they contain more substance, and it takes more time to develop. After they have reached their full development, it requires longer to dry out, and, of course, they do not open until this takes place. Many farmers confuse "early opening" with "early fruiting." There is little advantage in early maturing, except in the Northern regions of the cotton belt. The size of the bolls is important, because of its relation to storm-proof quality and the cost of picking.

Storm Proof Quality. Large bolls are usually more storm proof than

small bolls. The difference in storm proof characters may be noted by reference to the illustrations on page 16, taken in our variety test plot. These pictures were made Nov. 4th, and up to that time no rains had fallen, otherwise the damage would have been much greater. Large size in bolls does not necessarily mean storm proof qualities. In Figure 5 we have bolls nearly the same size in the two right hand plants. In one, the locks fall out badly, but not so, in the other. They grew not twenty feet apart.

Importance of Boll Characters. The most important are size and shape, which affect the cost of picking and resistance to weather damage.

For most conditions preference should be given to large sized oval shaped

Fig 5. Comparing shape and size before opening. Reduced somewhat more than one-half.

bolls. It is easier to pick a hundred pounds in cotton like Triumph, where 40 to 60 bolls make a pound, than in a variety like King or Simpkins requiring 120 or more bolls to make a pound. It takes twice as many grabs to get the same amount of cotton.

The Cost of Picking is usually 10 to 15c. per hundred less in large boll'd varieties. Where 1500 lbs of seed cotton is used for a bale, this would mean a saving of \$1.50 per bale.

The large boll'd varieties reduce the cost of picking in other ways. The past season we had a field of large boll'd cotton that was first picked November 28. It was practically all gathered at one picking, costing 75c. per hundred for picking. It had less than 1½ per cent on the ground, determined by actual test. Compare with cost of picking in a neighbor's field.

A neighbor had a small boll'd variety in a near-by field. Owing to the fact that the cotton would blow out in a few days after opening it was necessary to gather the crop in three pickings,—costing from 85c to \$1.25 per hundred pounds. There was a saving due to the storm resistance amounting on an average to 20c a hundred pounds, in picking alone, or \$3.00 a bale.

Storm proof varieties make a better grade of lint. In the above case there was another noticeable advantage from the use of the better cotton. While the better cotton was nearly all gathered in one late picking, it was a fact that it graded better and gained ¾c per pound on grade, equivalent to nearly \$4.00 per bale. There are still other advantages in the large boll.

In every farmer's experience there have been times when labor could not be had to pick cotton when needed. If you have a variety that "falls out" badly you have nothing to do but to take the loss due to low grade and waste, when labor is scarce. Such is not the case with storm proof varieties.

For the several reasons above mentioned we have always been particular about perpetuating selections that did not have reasonably good storm-proof qualities. The money value of good storm-proof quality is no small item,

How Increased Linting Makes Money for the Farmer. So long as it cost 75c to \$1.00 per hundred for picking seed cotton, and cotton seed sell around 75c to \$1.00 a hundred, it is plain that growing cotton seed is a losing proposition. The profits of a cotton crop must be made out of the lint.

We know of two fields of cotton which were separated only by a lane. One grown from common seed made 30.4 per cent lint, requiring 1639 lbs. seed cotton to make a 500 lb. bale. The other made cotton ginning out 39.5 per cent lint, and required 1265 lbs to make a 500 lb. bale. The difference amounts to 374 lbs seed cotton. If cotton picking cost 75 cents per hundred there was a saving of \$2.80 per bale on picking, by the use of a better linting seed.

A careful reading of the letters from our former customers show equal or greater yields of seed cotton per acre from our seed. If we assume that the yield is the same, and that the improved seed gave only 5 per cent more lint, it means a gain of 75 lbs. lint in the bale. At 10c per lb. this would mean a gain of \$7.50 per bale on the lint, in addition to the saving in cost of picking.

It is thus plain that good linting will more than pay the rent on the land.

"You requested a report on Ferguson's Roundnose Cotton;
Here are the figures:

LINTING OF FERGUSON'S ROUNDNOSE.

Seed cotton	-	-	-	435 lbs.
Seed	-	-	-	255 lbs.
Lint	-	-	-	180 lbs.

FIELD YIELDS.

Ferguson's Roundnose	-	760 lbs. per acre.
Mebane Triumph	-	750 " " "
Rowden	-	745 " " "

"That is **41.3 per cent lint** for Ferguson's Roundnose. It looks unreasonable, but they are the gin figures. I had them to clean out the rolls on two gin stands and run it thru, in order to have the seed pure. When it was all thru, they dumped the rolls again so I got all the seed.

"The Ferguson's Roundnose matures earlier than either of the other two varieties. The Rowden and Mebane Triumph had a lot of bolls unmatured when the frost came, while the Ferguson's Roundnose had very few. These figures do not show a large yield, but they are above the average for my neighborhood."

CHAS. SPEAKER, Maud, Oklo.

Fig. 6.—The row on the left is FERGUSON'S ROUND-NOSE, and shows scarcely any falling out. This was growing in variety test block and was fourth row from one shown below. Photo made Nov. 4, before any cotton was picked.



Fig. 7.—To show how the locks fall out of some varieties. Notice large amount of cotton in center middle and compare with Fig. 5. The loss in grade will amount to \$4.00 to \$10.00 a bale on such cotton.—Several times more than the entire cost of seed of good breeding.

The average yield of the seeds bought of you was good. The cotton had the largest bolls I have ever seen during my farming experience.

GEORGE WALLACE.

"The cotton seed we got from you is all you claim for it. The Ferguson's Roundnose surely is the cotton for me. We had lots of wind this fall and lots of that cotton was open, but it all stayed in the bolls. There is not any blown out. The cotton right by the side of it is blowing out fast. I am also pleased with the seed because they are pure. I found only three stalks that I think were not Ferguson's Roundnose. My father planted the Mebane Triumph and is well pleased with it. It is better than our cotton."

WESLEY SCHULER.

"The Ferguson's Roundnose Cotton Seed ordered from you last spring has 'made good,' both in drouth and in storm. The pickers say it makes the best cotton on the place and it has stood the hard wind well.—extra well."

C. P. HUDSON, Arkansas.

Mebane Triumph.

Justly Famous and Widely Used Because of its Large Acre Yields, Large Storm-Proof Bolls, and High Per Cent Lint.

The fortunate discovery of this now famous variety, and the careful development by its originator, Mr. A. D. Mebane, has been worth many millions of dollars to the cotton farmers of the Southwest. No other cotton previously known possessed so many good qualities. It was so obviously better than the seed in general use that its profit-making qualities were easily recognized and its use became wide spread in just a few years. It is remarkable in its adaptability, perpetuating its good qualities on many sorts of soil and in varied climates.

The good qualities of Mebane Triumph Cotton are due to the fortunate circumstance of its discovery, and the many years of systematic improvement given to it by its original discoverer and Prof. Saunders and Prof. Schumacher of the U. S. Department of Agriculture.

No other cotton previously grown in the Southwest equaled Mebane Triumph in having so many good qualities. This is most likely due to the fact that no other variety has received so much attention from persons who make exact seed breeding a special Science.

Our own seed of this variety have been grown from high bred, pedigreed stock-seeds, as explained in the table on page 4. These seed are good, just as represented, and will give you the same results, as reported by former customers. We know from the records of our own breeding work that our seeds are getting better each year. When our own seeds produce 37 to 39½ per cent lint, and our customers report 36 to 42 per cent lint, we feel that the results of our efforts to improve their good linting qualities have been worth while. Mebane Triumph will make an average turn-out of five percent greater than any ordinary cotton, and—most important of all—more pounds of seed cotton to the acre besides. See the letters.

Prices—Peck, 50c ; 1 to 4 bushels, \$1.50 per bushel ; 5 to 9 bushels, \$1.40 per bushel ; 10 to 20 bushels, \$1.35 per bushel ; 30 bushels or more, \$1.30 per bushel. Special prices on large club orders.

For the last three years we have been unable to supply the demand for these seed. Orders will be filled in the order received.

"We will close by wishing you a prosperous year. I planted your cotton seed last year and made more than anyone."

W. N. LEE'

"As to your Ferguson's Roundnose Cotton, will say, I think it fine. We picked 249 lbs. first picking; since the rain a few weeks it has begun a second growth, running up 2 feet to 18 inches, averaging 75 bolls and squares to the stalk.

"We have found all your seeds that we have bought to be just as represented, which is saying a good deal. We are very much pleased with them. I am going to plant all of the Ferguson's Roundnose Cotton next year."

Mrs. A. M. DAUGHTERY, Texas.

The cotton was O. K.—is the best I ever saw. Your cotton is the best storm proof cotton and the easiest to pick I ever saw.

P. W. ROBERTSON.

The 32 lbs. of Triumph Cotton seed I bought of you planted 3½ acres, rows 3½ feet apart. I raised 3443 lbs. of seed cotton. The first bale weighed 1535 lbs. and ginned out 526 lbs. lint, 22 lbs. off for bagging and ties.

OSCAR SCHUREMAN, Texas.

The yield was good, and the average was better than the average of the community. Triumph is surely a quick-maturing, big boll, storm proof cotton. Very little cotton here made so good a yield in the field. Have heard of none that linted better. My native seed made 500 pounds to the acre and linted 30 pounds to the 100 pounds of seed cotton. Of your cotton some made over 35 pounds of lint to 100 pounds of seed cotton.

F. T. Kerr, Texas.

I planted one bushel of Mebane Triumph Cotton on 2½ acres and made 2900 pounds. I wouldn't take \$3.0 a bushel for it. It was the best cotton in this part of the country. The yield was unusually good and I think the cause was good seed.

J. R. FLIPPEN

"Will say, in regard to the seeds which I ordered from you, that the Mebane Triumph Cotton is making a little better than two-thirds of a bale per acre, while other cotton is making less than one-half bale."

A. A. MORRISON.

Ferguson's Roundnose Cotton.

A New Variety that has Successfully Passed the Test of Practical Field Use.

For some years we have been giving special attention to the development of better strains of cotton. As a result, we have developed a number of strains of early, rapid fruiting, good yielding cottons, having more or less roundnose bolls. One out of the several hundred originally made, and tested, we called FERGUSON'S ROUNDNOSE COTTON. All others were discarded.

Last year we introduced this variety under restrictions selling only peck lots to a customer. From the several hundred pecks sent out many reports have come in, and in every case so far reported, the results have been satisfactory. In order that you may know just how satisfactory this variety has been in various parts of the Southwest we reproduce extracts from a number of their letters in this catalog.

Our excuse for introducing this variety was based on its proven ability to make more cotton per acre under average field conditions than any other ever tested on our grounds. How well it has maintained this reputation, we leave for others to say.

Here are the qualities found in Ferguson's Roundnose cotton that make it worth while for a farmer to grow it:

- Early and rapid fruiting.
- Ability to make large yields of cotton per acre.
- High per cent lint at the gin.
- Good length and body to fibre.
- Large bolls producing storm-proof burrs,—and too—burrs without troublesome "stickers" to bother in picking. This is made possible with the roundnose bolls.

This variety does not excel in all these qualities, but after five years breeding, selecting and testing, in field, laboratory, and market, we can say in the most positive terms, that we have secured a variety, which excels in lint production and money values per acre. This is not praise, but a statement of an experimentally proven fact.

The parent selection of Ferguson's Roundnose came out of what was supposed to be Jackson cotton. It was found, however, to have qualities that distinguished it from, and at the same time, made it superior to Jackson, or any other variety included in our tests.

Prices: 1 to 3 bushels, \$2.00 per bushel; 3 to 9 bushels, \$1.75 per bushel; 10 to 20 bushels, \$1.65 per bushel; 30 bushels or more, \$1.50 per bushel.

"I will report the results of the cotton seed purchased of you this year. On six acres of Mebane Triumph I have ginned out 623 lbs. of lint per acre, and have about 70 lbs. of seed cotton per acre yet to pick.

"Two acres Ferguson's Roundnose Cotton has already ginned out 507 lbs. per acre and have about 225 lbs. per acre seed cotton yet to pick. This variety has only one-third of a stand. It is the most perfect cotton for rich bottom lands or poor lands I ever planted here. I have sold all my seed and will give you the addresses of some large planters in the Brazos Valley that have seen my cotton growing on both sides of the public road, as the road is thru my farm and cotton on both sides. I cannot supply them with seeds."

R. D. PACKER, Texas.

"I received my shipment of seeds O. K. and will gather from three-fourths to a bale per acre. I am well pleased with them. They are the variety of seed for Northern Arkansas I think. This has been a hard crop year for cotton. I did not get anything scarcely except the July crop."

M. G. THOMPSON.

Sebastian Co., Ark. Farmers Union

You will be glad, I am sure, to learn that your Ferguson's Yellow Dent took the prize for upland corn at our county fair at Belton, this county. I selected the poorest sand hill side I had on the place—it was awfully poor, but I wanted to see what good seed and good cultivation would do. Twenty-five bushels is not a high-sounding yield, but from the land on which it was grown I consider it a remarkable yield and so do my neighbors, I suppose, as they all want seed of me next year. I regard Ferguson's Yellow Dent, although not strictly a thoroughbred corn, as the best poor land corn I ever saw. I am delighted with its behavior all the way through and with the results I got from it.

P. B. JACKSON, Arkansas.

Virgatus Cotton.

An Unusually Early, Rapid, Continuous Fruiting Variety, Specially Recommended Wherever Extra Early Rapid Maturing is Desired.

For many years we have recognized the need of a variety of cotton that would be without the faults of small bolls and short inferior lint found in varieties like King, and still have the good qualities that make these older varieties desirable for many situations.

Virgatus makes splendid yields on all types of upland. It is a good yielder wherever it has been tried, but because of its peculiar combination of qualities it is especially recommended for the following conditions:

- 1st—Where the boll weevils are sufficiently numerous to make extra early rapid fruiting a desirable quality.*
- 2d.—On very rich bottom lands where ordinary varieties are inclined to run to stalk and not to fruit.*
- 3d.—Sections near the Northern regions of the cotton belt, where extra early rapid fruiting is necessary in order that the crop may be developed before the severe weather retards harvesting the crop.*

It has the peculiarity of shedding its leaves with the coming of the first cool nights. It is distinguished by its virgate or rigid limbs, from which character it received its name.

It is earlier maturing than Triumph, or Ferguson's Round nose. The bolls are noticeably above medium size, and in opening holds the parts in such shape as to retain the cotton against ordinary winds and rains for considerable periods. The stiffness of the limbs is a great aid in overcoming weather damage. Virgatus cotton has remarkably well shaped stalks. The lint is of good length and body and gins out from 35 to 38 per cent lint.

Prices same as for Mebane Triumph.

Rowden Cotton No. 116.

In recent years we have not grown Rowden Cotton extensively, because we had other varieties that were much better yielders. We have, however, been working on several strains of this once popular variety. We have one strain "Rowden No. 116" which is far superior to anything in its class we have ever secured. The bolls are very large, and produce a lint of great strength and body, and measuring one and one-fourth inch or better in length. This strain was tested at the Mississippi Agricultural Experiment Station, and Professor Ewing reports:

"I may say that Rowden gave us the highest yield of any variety in our tests here this year."

We regard Rowden No. 116, as the best strain of Rowden we have ever developed. Our seed are just as pure and produce stalks as uniform in type as can be hoped for.

We have a small surplus of this excellent strain of pedigreed seed which we offer at \$2.00 per bushel.

"I am greatly pleased so far with the Virgatus Cotton seed purchased from you this spring. Planted three acres on May 24th, and at this date am pretty sure of three bales. It is opening up fine. About half of it is fallen and broken down on account of being so full of fruit. Stalks have from 50 to 150 grown bolls.

"I only planted between one-third and one-half acre in the Ferguson's Roundnose but it is just as good as the Virgatus. No fertilizer whatever was used." J. S. COFFEY, Texas.

Planted 10 acres, lost at least $\frac{1}{3}$, and will get five 500-pound bales. I have other cotton on the same piece of ground that will make $\frac{1}{2}$ less. The Triumph Cotton is the best I ever tried. Bolls are as large as Rowden, just as easy to pick and will make three or four pounds more lint to the 100 pounds. I think it ought to be checked about three or four feet apart owing to the richness of the land. I like it so well that I will plant my entire crop to Triumph next season.

W. J. BLACK, Texas.

A PAGE OF ARKANSAS CORRESPONDENCE that tells its own tale. These are only a few out of a number of similar reports on our seeds made to Commissioner Markham.

A. M. Ferguson,
Sherman, Texas.

Little Rock, Ark., Oct. 26, 1911.

Dear Sir:
"I have delayed making a report on the results of the cotton seed which we purchased for use on the "Demonstration Farms" this year until we could hear more fully from the people who have grown crops from this seed.

"I am now pleased to advise that a large majority of these people have been heard from, and that the replies in almost all instances have been very gratifying, to say the least. It seems that the cotton seed has given very excellent results in almost all cases. Some parties had already picked from 1200 to over 1500 lbs. of cotton to the acre three or four weeks ago. In some instances the yield will run as high as 200 lbs. per acre. In nearly all cases the yields have been largely in excess of those planted in other varieties grown on the same farms and under similar circumstances.

I was at Helena, Ark., this week and visited one of the men who objected most strenuously to the seed corn furnished him last spring. This farmer had two acres in Munson Corn, and we decided that the pile of corn gathered from same contained more than 100 bushels. Some of the ears measure 13 inches and were finely developed.

I enclose herewith a number of reports sent in. Please return when you are thru with them.
L. A. MARKHAM, Commissioner of Agriculture,
Mo. Pac. R'y Co., Little Rock, Ark.

MR. L. A. MARKHAM:—

In reply to yours of the 1st, I will say that you have my permission to use the letters in any way that you see fit. I will also give you a more correct statement of the turnout at the gin.

Four acres of land, planted with the seed that you sent me, produced four thousand pounds of seed cotton which produced 35 per cent lint. It proved fully satisfactory, beside the other cotton, which I planted.

Very respectfully, S. A. JACKSON.

MR. L. A. MARKHAM:—

In regard to the seed, which you sent me, will say that I am well pleased with the cotton. I think it the best cotton that I have ever raised. I think that I will make two and a half bales off of the three acres which I planted.

I planted it on very thin land—land that a half bale per acre is considered a big crop. I have used no fertilizer of any kind, and the Mebane Triumph is making a third more than Russell's Big Boll Prolific, on the same kind of land and with the same cultivation.

You may send this letter to Mr. Ferguson, if you wish.

Yours truly,
B. Y. WATSON.

Dear Sir:

I am taking this opportunity to report to you on the results which I secured with the cotton seed furnished me by Mr. Markham.

I am certainly well pleased with it. It is making a bale to the acre. I am going to plant all of my seed again next year, and if you have any other good variety, I should be very glad to procure some of them, in order to compare the two varieties.

Yours truly,
W. H. BURNS, Route 2.

Dear Sir:

In reply to your letter of the 19th will say that I can redistribute all of the seed, again this year, if it is satisfactory to you, and could place a thousand bushels more.

Mr. Whitley, to whom I gave two bushels of the cotton seed, and a half bushel of the Munson Corn, and is certainly well pleased with the results. He is making 1538 pounds of cotton to the acre, the first picking.

If you want to see some fine corn, just come up to the county fair, and see some of his Munson that will be on exhibition there. Both the corn and cotton were planted on old hill land, and no fertilizer was used.

The neighboring farmers are very anxious to secure all of the seeds from Mr. Whitley that they possibly can. All are very enthusiastic over them. He made over 50 bushels per acre and it was planted on old hill land without any fertilizer.

Very truly yours,
J. W. PARLIER, Special Agent.

Batesville, Ark., Sept. 21, 1911.

In reply to yours of the 19th, will say that the cotton seed which you sent me last spring has yielded from ten to twenty per cent better than any other cotton in the county. As it has done so well, there will be a greater demand for seed this next year, than the patches will furnish us.

I believe that these seed have done more towards bettering the cotton in this county, than anything has ever done before. Thanking you many times over for the seed, I remain,

Very truly yours,
J. E. TAYLOR, Special Agent.

Dear Sir—

I am indeed well pleased with the cotton for several reasons:

- 1.—It matures quicker than the cotton we had here.
- 2.—It makes more per acre than our cotton.
- 3.—The bolls are fine and large looking. I brought three open bolls thru town yesterday and the people of Haynes said they certainly were fine.
- 4.—It lints well.

I would not take hardly any price for the seed. We had too much rain in August, and the army worm came early also. But in spite of these obstacles, I am making three-fourths of a bale to the acre. If nothing had happened, I believe I would have made a bale per acre. But three-fourths of a bale to the acre is very good. Our native cotton would not do so well by half.

Yours very respectfully,

P. W. LONG.

Ferguson's Improved Red Rust Proof Oats.

Hardiness, Drouth and Rust Resistance, and Vigorous Stooling,
Combine to make This a Good Yielding Variety.



Fig. 8.—Head Row Test of FERGUSON'S RED RUST PROOF OATS. Planting the product of a single select head in a row, one grain to a hill, one foot apart. Each row is from a different head.—Contrast with the use of the old fanning mill as a means of determining which plants are hardiest, best stoolers, freest from rust, stiffest straw, largest heads and best quality and yield the largest quantity of grain

We are just as careful with our oats as any other line of our special field seeds. These oats have proven their good yielding qualities in the past and have met every claim we have made for them, i. e.—good yielding quality, hardiness to cold, resistance and ability to stand up in drouth, as well as comparative freedom from damage by rust in any stage.

The stooling quality of these oats is such that one and one-half to two bushels will give an excellent stand, whereas it is usual to plant 2½ to 3 or more, bushels of ordinary red oats. It will thus be seen that it will cause no additional expense per acre to plant your entire field with our improved oats. While they will cost more per bushel, the cost of seeding will be about the same. You will have a strain of pure red oats without additional cost.

Our seed last year were the heaviest seed we have handled, ranging from 38 to 42 pounds per measured bushel. One special lot measured 45½ lbs. per bushel. All of the past crop sold. We are booking orders for seed from crop now growing. Prices, subject to market changes: 1 to 3 bushels, \$1.00 per bushel; 4 to 6 bushels, 90c; 11 to 20 bushels, 75c; 25 to 100 bushels, 70c.

These seed are put up in special sealed bags, with a numbered certificate in each bag. Oats are the safest, surest and usually the most profitable small grain crop grown in the South. Many farmers have too long been contented with the results secured from thresher run seed.

Small Grain and Forage Crops

Besides Our Special Seeds We have a Large Assortment
of all Standard Varieties of Field Seeds.

Texas Red Rust Proof Oats. When you want fancy recleaned seed of genuine Texas Red Rust Proof Oats, in any quantity write us. We quote subject to market changes. 75c. per bushel in lots of ten bushels or more.



Fig. 9.—SIBLEY'S NEW GOLDEN WHEAT, grown in blocks to test the rate of seeding. Three pecks to the acre gave maximum yield of 27 bushels per acre.

Wheat

Grayson county is in the most productive wheat section in the Southwest and has been recognized as a great wheat section for a quarter of a century.

Sibley's New Golden—The best yielding variety in all our tests, a splendid variety of soft wheat. It has been thoroughly tested at the Oklahoma Experiment Station and gave the highest average yield of any variety in their test. In our own trials here we secured the largest yield from Sibley's New Golden planted 3 and 4 pecks to the acre. It stands dry weather splendidly, and is a vigorous growing free stooing wheat that merits general use. It is a small berried soft wheat, of good milling qualities, and is fast coming into general favor. Price per bushel \$1.25. Current prices on large orders.

Native Mediterranean—We have made arrangements by which we can supply our patrons with a strain of acclimated Mediterranean wheat that is thoroughly reliable throughout the wheat growing section of the Southwest. A well known variety of soft wheat of excellent quality. Current prices on application.

Rudy Wheat—This is a variety of bearded soft wheat introduced from Pennsylvania. It has proven to be a very heavy yielder, and is well liked by all who have tried it. It has been grown in Grayson County for four seasons. We have tested it in comparison with other varieties and have found it a better yielder than the native Mediterranean. It has the largest, longest heads, and the largest, prettiest grain of any variety we know. Prices on request.

Fultz Wheat, or Smooth Head Wheat—This is a variety that is extensively grown the world over, and is everywhere a good yielder. The superior yielding qualities of Fultz Wheat and the extra value of the straw are generally conceded. Owing to the occasional damage by birds just as the heads were maturing our farmers ceased growing smooth head wheat some years ago. In recent years, however, with the disappearance of the birds, the smooth head wheats are again coming into use. We want to send you samples of Fultz Wheat. You will be well pleased with the large, roundish, plump berry.

Barley **Texas Winter** is the best variety for the Southwest. Barley is often an excellent crop, not only for its grain, but to furnish winter grazing for horses, cattle and especially hogs and poultry. It is strictly a winter barley and withstands the severe weather. It is recommended above all others for early and late fall planting. We call this variety "Texas Winter Barley" at the suggestion of Prof. H.B. Derr, Barley Expert of the U. S. Department of Agriculture. It is quite similar to the famous Tennessee Winter Barley, but is more resistant to the cold than the latter. Barley is a profitable and safe grain crop and highly desirable for winter grazing. Price per bushel \$1.25. Special prices for large orders on request.

Rye Rye is a very hardy plant suitable for winter pasture, and sometimes makes excellent grain crops in the Southwest. It is very desirable for winter pasture and for a cover crop to be plowed under in early spring. Price per bushel, \$1.25. Write for current prices in August.

Millet Millet makes a good forage crop and may be planted early, as soon as danger of frost is over, or later on potato or stubble land. Don't let your land grow up in weeds to plague you when it can be made to produce an abundance of good feed.

German Millet—We offer the large headed German Millet of the purest and best strains to be had. When grown for hay, plant one-half to one bushel per acre, either broadcast or drilled. When planted for seed, use half quantity. Make a good seed bed before sowing millet. Price, 25 lbs. \$1.00; bushel, \$1.75. Larger quantities at market price.

Cane There are several varieties of Sugar Cane, differing in the time required for ripening and qualities for forage or syrup making. Sugar cane is a valuable crop whether grown for forage or for making syrup and should be more generally planted. When sown broadcast for forage, use one to two bushels per acre. When drilled, half the amount. Plant any time from March to August. Prices are subject to frequent changes. Send for special prices when in the market. Open orders will be filled at current market price.

Early Amber—Earliest variety and very popular both for forage or for syrup making. \$1.25 per bushel. Ask for current prices.

Sumac or Red Top—The Sumac varieties are later maturing than the Amber. They are very desirable, however, for early planting. In our test the Sumac variety proved to be the best drouth resister, and made the largest yield of hay. Excellent for syrup. From the results of our own tests, and the information gathered from a wide range of reports and personal observation we recommend this above all others. Requires about half the amount of seed compared with the common Amber. Price per bushel \$1.50. Get current prices on larger orders.

The Triumph Cotton made a good stand, fruited early, and matured well, in spite of many unfavorable conditions. Compared with other varieties, planted under the same conditions, the points in favor of Triumph are 100 per cent increase.

W. F. HADEN, Special Agent, Arkansas.

ALFALFA— THE KING OF ALL FORAGE CROPS

We offer the best imported Alfalfa seed, and also native grown. Every lot of seed will be thoroughly tested for purity and high germinating power. We will protect the interests of our customers and offer no seed that are not reliable. Alfalfa (meaning the, 'Best Fodder') is not only one of the best forage crops, but on *suitable land it is the most profitable crop in the Southwest*. We advise every farmer to have a good sized field of alfalfa. It will supply the *most, best and cheapest feed* that can be grown for Hogs, Dairy Cattle, Poultry, and all kinds of work stock. Corn, Alfalfa and a little Cotton, make a fine combination for every farm.

Sow Alfalfa broad cast, either in the early spring or fall, using 15 to 20 pounds of seed to the acre. Have your seed bed in good tilth before sowing.

Prices on Alfalfa Seed.—The market price of Alfalfa seed varies, according to quality and demand. We quote standing prices on Extra fancy seed, subject to market changes as follows: 20 lbs., enough for one acre, \$4.00; 40 pounds, enough for two acres, \$7.50; one bushel, 60 lbs., sufficient for three acres, \$10.75. \$17.50 per hundred pounds. Write for prices on large orders.

Cow Peas

Many farmers have found it very profitable to drill cow peas in corn at last plowing, or to plant on potato or stubble land after harvest. The Cow Pea is more adaptable to a wide range of soil, than alfalfa or most any other legume. Plant your stubble field in cow peas. Write for current prices.

Whip-Poor-Will—The most popular general purpose variety. Vines are erect, bunch like, facilitating harvesting of both vines and peas. Has brown speckled peas. \$2.00 per bushel. Subject to market changes.

Black-Eye—Vigorous growing variety and universally esteemed for snap beans, dry beans and for forage. Fruitful on black land. Price per peck, 75c; per bushel, \$3.00. Subject to change.

Clay—Similar to Whip-Poor-Will but later and makes larger growth of vine. Suitable for seed crop, pasture or hay crop, or soil renovator.

Mixed Peas—We often have small lots of mixed peas. suitable for field planting. We often have small lots of special varieties. Write for what you want.

Bur Clover

A clover for winter grazing. May be sown on Bermuda sod. There are two kinds of Bur Clover, both native to Mediterranean regions. Both forms have become widely distributed over the warmer regions of the United States. Get Bur Clover started on your place and you have a permanent winter pasture without further effort. The general use of Bur Clover is advised by the Texas A. & M. College Experiment Station. Sow 20 pounds of seed in bur, or 12 to 15 pounds of recleaned seed per acre. Write for special prices on large lots. We handle seeds in bur principally as they are more satisfactory than recleaned seed.

California Bur Clover 10 lbs., \$1.25; 50 lbs., \$5.50; 100 lbs., \$10.00.

Southern or Spotted Bur Clover. Best variety for the Southwest. 20c. per pound; \$18.00 per 100 pounds. Subject to market changes.

Essex Rape

A quick growing variety of Rape which makes excellent winter grazing for all kinds of stock. It may be sown any time, but is usually planted after early fall or late summer rains to make winter feed for stock. Sow 8 lbs. per acre broadcast, 4 or 5 pounds when drilled. Price per pound postpaid, 25c; by express or freight 10 pounds \$1.50; 100 pounds write for prices.

Suggestions to our Customers

An observance of the suggestions and information given below will facilitate rapid handling of your orders.

Order Early and it will enable us to fill your order before the rush season comes. Please remember that the supply of our own special seeds is limited. It takes twelve months to get a new supply.

In Making out Your Order please be sure to mention the variety, the quantity of seed of each variety, and the prices for the quantity ordered. Send money with your order. Give name and address in full; also freight or express office, if different from your post-office.

Substitutions—If you should desire substitutions made in your order in case we should be out of the varieties ordered please indicate what you desire. We will make no substitutions unless instructed to do so.

Shipping Instructions should state whether the goods are to go by freight, express or mail. Unless directions are given we will ship the cheapest way,—usually by freight. If goods are to be delivered to stations where there is no agent, freight must be prepaid. Include enough in your remittance to pay the freight to such station. Any excess will be promptly refunded.

Shipping Facilities at Sherman are unsurpassed. We have eight railroads, two interurban lines and four express companies, giving thirteen outlets from Sherman. We guarantee the safe arrival of all shipments, though we will not be responsible for delays in arrival.

Mistakes—If mistakes occur tell us. We will correct them. Others cannot. Write us all the facts and we will see that you are treated fairly. Write us good naturally if you can, but if you can't, please write us anyway.

Our Liberal Guarantee is "**SATISFACTORY SEEDS OR MONEY BACK,**" without "ifs" or "ands" or questions asked. All that we ask is that you examine the seeds on arrival, and if not perfectly satisfactory return them to us at once and we will refund you the price paid for same. No honest seedsman who can, and expects to make his published statements good, will promise you a perfect sample of seed. We will, however, make you the sole judge of whether the seeds suit you or not. We have that much confidence in your judgment and our seeds.

Acclimated Seeds.—We offer seeds of varieties we can recommend for Oklahoma, Texas, Louisiana and Arkansas. We make a special business of field seeds, giving particular attention to seed corn, cotton seed and seed oats, **IMPROVED AND GROWN FROM OUR OWN STOCK OF PEDIGREE SEEDS.**

General Field Seeds.—We handle a general line of high grade field seeds offering only such seeds as we can accurately describe to an intelligent, discriminating class of buyers.

A. M. Ferguson & Co.

Field Seeds Exclusively.

Sherman, Texas.

Buy Seeds From Seed Breeders

They are Responsible for the Quality



Which Kind of Seed do You Plant?

A. M. Ferguson & Co

Improved Field Seeds

Sherman, Texas.